

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A ~~small~~ synthetic HCV-IRES ~~ribonucleic~~ nucleic acid of molecule having the sequence of SEQ ID NO. 1 GGGG-GGGC-CCTCTCG-GTAGA-ACACCA-TGACGGA-CTATCCACGAACGCTCACGGGGCCCTCC.

2. (Currently amended) A ~~structural analog or mimic of small~~ synthetic HCV-IRES ribonucleic acid of molecule having the sequence of SEQ ID NO. 4 GGGG-GGGC-CCTCTCG-GTAGA-ACACCA-TGACGGA-CTATCCACGAACGCTCACGGGGCCCTCC.

3-4. (Cancelled).

5. (Currently amended) A polynucleotide comprising the HCV-IRES-nucleic acid molecule of Claim 1 sequence GGGG-GGGC-CCTCTCG-GTAGA-ACACCA-TGACGGA-CTATCCACGAACGCTCACGGGGCCCTCC or the structural analog or mimic thereof.

6. (Original) A recombinant vector comprising the polynucleotide of claim 5.

7. (Currently amended) A method of synthesizing the ribonucleic acid molecule of Claim 2 ~~HCV-IRES nucleic acid sequence~~ GGGG-GGGC-CCTCTCG-GTAGA-ACACCA-TGACGGA-CTATCCACGAACGCTCACGGGGCCCTCC or the structural analog or ~~mimic thereof~~ by an in vitro transcription method assay using known methods.

8. (Currently amended) A method for preparing a purified ribonucleic acid (RNA) molecule as claimed in claim 7, comprising the steps of:

(a) allowing wherein synthetic the DNA oligonucleotide corresponding to domain III stem-loops + structures polynucleotide of Claim 5 with T7 promotor sequences at the its 5' end, was to anneal annealed to T7 RNA polymerase promoter primers and to be transcribed in vitro using by T7 RNA polymerase in an in vitro transcription reaction to form an RNA molecule, and

(b) separating said RNA molecule from extracting the transcription reaction with phenol and chloroform, purifying and concentrating the RNA formed by alcohol precipitation, drying the RNA pellet in vacuum centrifuge and dissolving in nuclease free water to obtain the purified ribonucleic acid molecule.

9. (Currently amended) A method for making a recombinant vector comprising the step of inserting the Polynucleotide ~~or the structural analog or mimic~~ of claim 5 into a vector.

10. (Cancelled).

11. (Currently amended) An antiviral composition ~~containing~~ comprising the ribonucleic acid molecule of Claim 2 ~~nucleic acid sequence~~ GGGG-GGGC-CCTCTCG-GTAGA-ACACCA-TGACCGGA-CTATCCCACGAACGCTCACGGGGCCCTCC ~~or a structural analog or mimic~~ optionally admixed with a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.

12. (Currently amended) A method of manufacturing an antiviral composition for treating liver cirrhosis ~~and or~~ hepatocellular carcinoma caused by hepatitis C virus, said method comprising admixing the ribonucleic acid molecule of ~~nucleotide sequence or a structural analog or mimic according to claim 1 or 2~~ with a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.

13. (New) A ribonucleic acid molecule comprising a fragment consisting of the sequence of SEQ ID No. 5.

14. (New) A modified virus harboring the ribonucleic acid molecule of claim 13.

15. (New) A method for treating and/or preventing HCV infection by inhibiting HCV IRES mediated translation, said method comprising the steps of:

- (a) introducing into a person an agent capable of binding to the ribosomal protein S5;
and
- (b) allowing said agent to reduce the binding of the 40S ribosomal subunit to the HCV IRES, thereby inhibiting HCV IRES mediated translation.

16. (New) The method of claim 15, wherein said agent is an RNA molecule having 100% sequence identity to domain III of the HCV IRES.

17. (New) The method of claim 15, wherein said agent is an RNA molecule having 100% sequence identity to the SL III e+f subdomain of the HCV IRES.

18. (New) The method of claim 15, wherein said agent is an RNA molecule consisting of the sequence of SEQ ID No. 4.